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L4: Entry 1 of 2

File: USPT

Feb 24, 2004

US-PAT-NO: 6697103

DOCUMENT-IDENTIFIER: US 6697103 B1

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TITLE: Integrated network for monitoring remote objects

DATE-ISSUED: February 24, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Fernandez: Dennis Sunga Woodside CA 94062 Fernandez: Irene Hu Woodside CA 94062

APPL-NO: 09/ 045412 [PALM]
DATE FILED: March 19, 1998

INT-CL: [07] H04 N 7/18

US-CL-ISSUED: 348/143; 148/152, 148/169

US-CL-CURRENT: 348/143; 348/148, 348/152, 348/169

FIELD-OF-SEARCH: 348/142-169, 701/209, 701/16, 701/23, 701/24, 705/417, 382/104,

455/432, 340/905, 340/995, 340/539, 441/36, 342/41, 342/357

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PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search ALL

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4511886</u>	April 1985	Rodriguez	
4524384	June. 1985	Lefkowitz et al.	محاد بردان داده
4591823	May 1986	Horvat	340/53
<u>4965574</u>	October 1990	Fukushinma et al.	340/995
4994971	February 1991	Poelstra	364/424.04
5223844	June 1993	Mansell et al.	
<u>5515285</u>	May 1996	Garrett, Sr. et al.	364/460
<u>5539429</u>	July 1996	Yano et al.	345/173
<u>5633946</u>	May 1997	Lachinski et al.	
<u>5673305</u>	September 1997	Ross	

5694322	December 1997	Westerlage et al.	364/464.27
<u>5712899.</u> .	January 1998 Transport	ري P _i ace, II	379/58
<u>5726660</u>	March 1998	Purdy et al.	
5774070	June 1998	Rendon	340/905
<u>5809161</u>	September 1998	Auty et al.	382/104
5970481	October 1999	Westerlage et al.	705/417
6018697	January 2000	Morimoto et al.	701/209
<u>6055426</u>	April 2000	Beasley	455/432
6122573	September 2000	Higashi et al.	701/23
6128571	October 2000	Ito et al.	701/201
<u>6154693</u>	November 2000	Aberschitz et al.	701/16

OTHER PUBLICATIONS

"Intrinsyc Announces Server for Embedded Computer Applications", Internet Computing, Jun. 5, 1997 (http://www.zdnet.com/icom/news/199706/03/news3.html).

ART-UNIT: 2613

PRIMARY-EXAMINER: Kelley; Chris

ASSISTANT-EXAMINER: Vo; Tung

ATTY-AGENT-FIRM: Fernandez & Associates, LLP

ABSTRACT:

Integrated imaging and GPS network monitors remote object movement. Browser interface displays objects and detectors. Database stores object position movement. Cameras detect objects and generate image signal. Internet provides selectable connection between system controller and various cameras according to object positions.

20 Claims, 4 Drawing figures

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L4: Entry 2 of 2

File: USPT

Dec 14, 1999

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US-PAT-NO: 6002326

DOCUMENT-IDENTIFIER: US 6002326 A

TITLE: Automotive vehicle anti-theft and anti-vandalism and anti-carjacking system

DATE-ISSUED: December 14, 1999

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Turner; Valerie Jean

Compton

CA

ASSIGNEE-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Clear

TYPE CODE

Turner; Valerie

Compton

CA

04

APPL-NO: 08/ 899473 [PALM] DATE FILED: July 22, 1997

PARENT-CASE:

This is a continuation-in-part of Ser. No. 08/308,271 filed Sep. 19, 1994, now abandoned.

INT-CL: [06] $\underline{B60}$ \underline{R} $\underline{25}/\underline{10}$

US-CL-ISSUED: 340/426; 180/287, 307/10.2, 340/937, 348/148, 348/152

Search Selected

US-CL-CURRENT: 340/426.1; 180/287, 307/10.2, 340/426.12, 340/937, 348/148, 348/152

FIELD-OF-SEARCH: 340/426, 340/429, 340/937, 348/113, 348/143, 348/148, 348/151, 348/152, 348/153, 348/154, 348/155, 180/287, 307/10.2

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
5027104	June 1991	Reid	340/426
5223844	June 1993	Mansell et al.	342/457
<u>5334974</u>	August 1994	Simms et al.	340/426
5515043	May 1996	Berard et al.	340/426

<u>5515285</u> May 1996 Garrett, Sr. et al.

340/426

ART-UNIT: 276

PRIMARY-EXAMINER: Swarthout; Brent A.

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ABSTRACT:

An automotive vehicle anti-theft anti-vandalism and anti-carjacking system utilizing both an audible alarm and visual monitor system for reducing the incidence of theft or vandalism of an automotive vehicle and an emergency alarm device in connection with an emergency alarm station for preventing carjacking or emergency type situation involving the vehicle or the individuals of the vehicle. The alarm and monitor system comprises one or more video cameras mounted within a vehicle and which are adapted for scanning movement by means of a simple oscillating $\underline{\text{scanning}}$ motor. The video $\underline{\text{camera}}$ is equipped with an emergency alarm device designed to signal the emergency alarm station of an emergency type situation. The emergency alarm station comprises video monitor operators responsible for monitoring and handling an emergency situation then informing a 911 emergency station and video monitor units which are capable of receiving signals from the emergency alarm device for tracking and video recording an emergency situation involving the individuals of the vehicle or the vehicle itself. Motion or vibration sensors are also mounted on the vehicle in selected locations to detect movement of the vehicle or activity in proximity to the vehicle beyond a certain threshold level. A remote unit containing a video screen is also provided for viewing the actual conditions or emergency surrounding the automotive vehicle, as detected by one or more of the video cameras. The remote unit is also equipped with an emergency alarm device for a quick response to any emergency situation. The system also includes a tracking mechanism upon emergency situation the tracking mechanism could cause the cameras to rotate a separate path to view second display signs scenery and or building for tracking purposes.

7 Claims, 4 Drawing figures

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L4: Entry 2 of 2

File: USPT

Dec 14, 1999

DOCUMENT-IDENTIFIER: US 6002326 A

TITLE: Automotive vehicle anti-theft and anti-vandalism and anti-carjacking system

Abstract Text (1):

An automotive vehicle anti-theft anti-vandalism and anti-carjacking system utilizing both an audible alarm and visual monitor system for reducing the incidence of theft or vandalism of an automotive vehicle and an emergency alarm device in connection with an emergency alarm station for preventing carjacking or emergency type situation involving the vehicle or the individuals of the vehicle. The alarm and monitor system comprises one or more video cameras mounted within a vehicle and which are adapted for scanning movement by means of a simple oscillating scanning motor. The video camera is equipped with an emergency alarm device designed to signal the emergency alarm station of an emergency type situation. The emergency alarm station comprises video monitor operators responsible for monitoring and handling an emergency situation then informing a 911 emergency station and video monitor units which are capable of receiving signals from the emergency alarm device for tracking and video recording an emergency situation involving the individuals of the vehicle or the vehicle itself. Motion or vibration sensors are also mounted on the vehicle in selected locations to detect movement of the vehicle or activity in proximity to the vehicle beyond a certain threshold level. A remote unit containing a video screen is also provided for viewing the actual conditions or emergency surrounding the automotive vehicle, as detected by one or more of the video cameras. The remote unit is also equipped with an emergency alarm device for a quick response to any emergency situation. The system also includes a tracking mechanism upon emergency situation the tracking mechanism could cause the cameras to rotate a separate path to view second display signs scenery and or building for tracking purposes.

Application Filing Date (1): 19970722

Brief Summary Text (26):

The present invention relates in general to an audible and visual automotive vehicle anti-theft anti-vandalism and anti-carjacking system. This system primarily relies upon the use of both first audible messages and first visual messages which can be transmitted to a remote location where the owner or user of the vehicle may be located and for apprising this owner or user of the condition of the vehicle and particularly an attempted theft or vandalism. The system associated with an 24 hr. emergency alarm station would also rely upon the use of tracking mechanism and both second audible messages and second visual messages which an be received from a remote location where the owner or user of the vehicle apprises the emergency station monitoring operator by actuating the emergency alarm device upon an attempted carjacking or emergency situation involving the individuals of the vehicle and the vehicle itself, having this monitoring operator responsible for viewing, monitoring, recording and tracking the situation, then informing the 911 emergency station thereof.

Brief Summary Text (27):

In a more specific form, the present invention relies upon one or more video cameras which are mounted in the vehicle for scanning the vehicle and surrounding environment. In a preferred embodiment, the scanning video <a href="mailto:camera="camera=

Brief Summary Text (28):

In another addition, this system also relies upon an emergency alarm device that is located on the video <u>camera</u> and the remote control unit or perhaps in the vehicle front paneling area for the owner or user of the vehicle to have immediate access. Preferably the alarm device is electrically constructed so that when the user of the vehicle would activate the switch upon an attempted carjacking or emergency situation, this will cause a transmitting alarm signal at the emergency station.

Brief Summary Text (31):

The anti-theft anti-vandalism and anti-carjacking system of the present invention also comprises a remote control unit often referred to as a "monitor" and which includes a raster pattern screen, such as a small television screen, for receiving video images generated by the scanning <u>camera or cameras</u>. The remote control monitor also includes first alarm which is energized when the sensors at the vehicle generates an audible alarm. In this way, if the owner or user of the vehicle is at a remote location or is not within eyesight of the vehicle, he or she can then immediately inspect the images obtained by the scanning video <u>camera</u>. The remote control monitor also includes an emergency alarm device which can be activated by the user of the vehicle upon an attempted carjacking or emergency situation to signal a second audible alarm at the emergency alarm station being at another remote site.

Brief Summary Text (32):

The present invention is often referred to as both an alarm and monitor system since the invention is effective for generating both an audible alarm and a video images of the individuals of the vehicle and the vehicle itself and also the environment immediately surrounding the vehicle. In accordance with this system and the method of use associated therewith, it can be seen that the user of this antitient anti-vandalism and anti-carjacking system is capable of determining the condition of his or her vehicle and the potential for a theft or vandalism of his or her vehicle. Also, it can be known that the user of this anti-theft anti-vandalism and anti-carjacking system is provided with 24 hr. security that is capable of handling any emergency type situation until proper authorities take over.

Brief Summary Text (34):

Furthermore the second controlled tracking mechanism would track the automotive vehicle upon an emergency situation 3 to 5 minutes after the emergency alarm device is activated. Causing the <u>camera or cameras</u> to second display signs, scenery and or buildings. This is also an effective deterrent to reduce if not prevent stripping of automotive parts or the like.

Brief Summary Text (35):

The present invention thereby provides an automotive vehicle alarm and monitor system which effectively reduces theft vandalism carjacking or emergency situation involving the individuals of the vehicle and the vehicle itself and which thereby fulfills all of the objects and advantages which have been sought therefor. While this anti-theft anti-vandalism and anti-car-jacking system is more fully illustrated in the accompany drawings and more fully described in the following detailed description, it should be understood that the following detailed description and the accompany drawings are set forth only for purposes of illustrating the general principles of the invention and are not to be taken in a

limiting sense.

பார்க்க Drawing Description Texts (5) : பார்க்க மார்க்க மார்க்க வருக்கு வருக்கு வருக்கு வருக்கு வருக்க வருக்க வருக்க

FIG. 3 is a fragmentary side elevational view showing a portion of a detachable video <u>camera</u> and scanning motor, as well as a remote monitor used in and forming part of the automotive vehicle anti-theft anti-vandalism and anti-carjacking system of the present invention; and

Detailed Description Text (3):

The automotive vehicle anti-theft anti-vandalism and anti-carjacking system of the present invention comprises one or more video <u>cameras</u> 10 which are operatively mounted in the vehicle itself. In a preferred mode, and in order to prevent thief or vandalism of the <u>camera or cameras</u>, it is preferable to mount the <u>cameras</u> within the interior of the vehicle so that the vehicle can be locked and thereby essentially preclude damage or theft of the camera or cameras.

Detailed Description Text (4):

The <u>cameras</u> 10 are essentially conventional in construction and generally comprise one or more known video <u>cameras</u> which are usually operable either from a battery source of power or from electrical outlets, such as a a 110 volt household current electrical outlet. In a preferred embodiment of the invention, the <u>cameras</u> 10 are operable from the electrical power system of the automotive vehicle. For this purpose, the <u>cameras</u> 10 are connected to the vehicle's electrical circuitry through a conventional transformer 12 and rectifier circuit arrangement 14.

Detailed Description Text (5):

In FIG. 1, it can be observed that a pair of <u>cameras</u> 10 are employed in the automotive vehicle A. These <u>cameras</u> 10 are conventionally mounted on support arms 16 for either suspension from a ceiling of the vehicle or support on another fixed portion of the vehicle, it should be understood, however, that while two <u>cameras</u> are illustrated, either one or two or any other number of <u>cameras</u> could be employed as may desired.

Detailed Description Text (7):

Referring to FIG. 3, it can be observed that a pair of video <u>cameras</u> 10 are used in the vehicle. Since each <u>cameras</u> and the operating assembly therefor are substantially identical, only one such <u>camera</u> 10 is more fully illustrated and described herein. The <u>camera</u> 10 is mounted on a suitable support arm 16, as aforesaid, and has a portion extending through a structural member 20 forming part of the automotive vehicle A. The arm 16 is connected to a scanning motor 22, which causes an oscillating or rotating movement of the <u>camera</u> 10, as illustrated, In this case, the structural member 20 forming part the vehicle A may, for example, may be that of the dashboard of the vehicle.

Detailed Description Text (8):

The scanning motor 22 may preferably be an oscillating motor which causes oscillatory rotation of the support arm 16 and hence the <u>camera</u> 10 in order to enable a scanning thereof otherwise, the motor 22 could be connected to a separate gear mechanism (not shown) for causing such movement.

Detailed Description Text (9):

As the electric scanning motor 22 is energized, the <u>camera</u> 10 will cause a scanning movement, that is, it will oscillate back and forth in a scanning path. If desired, the <u>camera</u> 10 could be designed for complete rotations. The position of the <u>camera</u> is established so that it can obtain an optimum view of first displayed conditions surrounding the vehicle in a full 360 path, or otherwise, a selected arcuate path. In the event that the scanning <u>camera</u> 10 does not rotate a full 360, it would then be desirable to employ the second <u>camera</u> in combination with the first <u>camera</u>.

Detailed Description Text (10):

The scanning <u>camera or cameras</u> 10, in and of themselves, will not generate any alarm. However, they will operate in conjunction with a control circuit 24 which will cause the generation of san alarm when one or more sensors 26, hereinafter described, are tripped. The control circuit 24 may be a relatively simple control circuit and, for that matter, it may be microprocessor operated circuit. The circuit is designed to cause energization of the motor 22 and energization of the <u>camera</u> 10 upon certain conditions as, for example, vibration of the vehicle which exceeds a predetermined threshold level.

<u>Detailed Description Text</u> (11):

The vehicle is provided with the one or more vibration sensors 26 (as shown in FIG. 4) which are mounted on the vehicle. These sensors 26 may adopt the form of either vibration detectors or motion detectors, or the like. When the vehicle is subjected to any type of vibration or motion, the sensors 26 will cause a triggering of the control circuit 24 to energize the <u>cameras</u> 10 and the scanning motor 22.

Detailed Description Text (12):

In FIG. 4, it can be observed having a track mechanism 56 in connection to the vehicle's electrical circuitry. This track mechanism 56 would operate in conjunction with <u>cameras</u> 10 to signal a second audible alarm at the emergency alarm station video monitor 52 electrical circuitry (not shown) and would be actuated only by the user of the vehicle actuating the emergency alarm device. Therefor, when the emergency alarm device signal second audible alarm the emergency alarm station 52, the video monitor operator would monitor the tracking causing <u>camera</u> 10 to rotate to a separate path to view second display signs, scenery and or buildings then inform a 911 emergency station thereof. It should be understood, that the illustration of the track mechanism 56, in connection to the vehicle electrical circuitry can be operated separately and manually from the vehicle's electrical circuitry of the host.

Detailed Description Text (13):

Again in FIG. 4, the <u>camera</u> 10 can also be observed having an emergency alarm device 46. However, it should be understood that although the <u>camera</u> 10 illustrates the emergency alarm device, this emergency alarm device can also be located in the interior of the vehicle, preferably in the front paneling of the vehicle for immediate access and control. The <u>camera</u> 10 in association with an emergency alarm device 46 is provided with an transmitter 50 of conventional structure which would operate in conjunction with a video monitor receiver (not shown) at the emergency alarm station 52. The emergency alarm device 46 and the transmitter 50 is designed to operate separately and manually from the vehicle's electrical circuitry of the host, therefore, if the vehicle generate first audible alarm, this alarm will not signal the emergency alarm station 52, this emergency alarm device transmitting second audible alarm signal is actuated only by the individual of the vehicle upon an attempted carjacking or emergency situation.

CLAIMS:

- 1. An automotive vehicle anti-theft anti-vandalism and anti-carjacking system in connection with a 24 hour emergency alarm station including a remote monitor unit which receives audio and video inputs from the vehicle and communications from said remote monitor unit to reduce vehicle theft vandalism and carjacking in an emergency situation involving the vehicle and the individuals of the vehicle and which provides a tracking mechanism, said automotive vehicle anti-theft anti-vandalism and anti-carjacking system in connection with a 24 hour emergency alarm station comprising:
- a) a 24 hour emergency alarm station in connection with an automotive vehicle comprising video monitors and video monitor operators at a remote site in a designated building having responsibility for recording and viewing or tracking and monitoring an emergency situation involving the vehicle or individuals of the

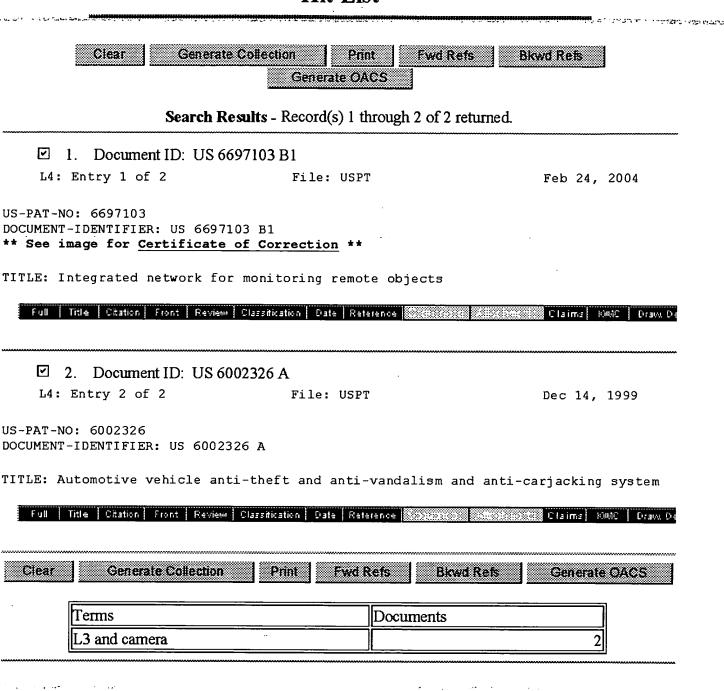
vehicle and then informing a 911 emergency station thereof;

- connection with said 24 hour emergency alarm station video monitors for generating a video image of the vehicle or individuals of the vehicle at said 24 hour emergency alarm station video monitors;
 - c) display means operatively associated with said 24 hour emergency alarm station video monitors and said remote monitor unit to display a portion of the vehicle or individuals of the vehicle involving an attempted carjacking or emergency situation;
 - d) means associated with the video means and emergency alarm device for transmitting a video image and audible alarm signal to said 24 hour emergency alarm station video monitors for alerting the video monitor operation of an attempted carjacking or emergency situation;
 - e) alarm means operatively associated with the vehicle for generating an audible alarm at the vehicle when at least one vehicle sensor is triggered by sensing an attempted vehicle theft condition;
 - f) said emergency alarm device including a transmitter located within the vehicle front panel or on a video <u>camera</u> of the vehicle and said remote monitor unit for transmitting an alarm signal and video images to said 24 hour emergency alarm station when a switch is actuated manually by an individual of the vehicle upon an attempted carjacking or emergency situation;
 - g) control means operatively associated with <u>scanning</u> video <u>cameras</u> of the vehicle to control timing and rotations of the <u>scanning</u> video <u>cameras</u> when at least one vehicle sensor is triggered by sensing an attempted vehicle theft condition;
 - h) track mechanism means associated with vehicle causing video $\underline{\text{cameras}}$ of the vehicle to rotate to provide a 360 degree view of conditions surrounding the cameras; and
 - i) video monitor means operatively associated with said emergency alarm device capable of receiving alarm signals and video images and tracking information from the vehicle at a remote site;
 - j) said remote <u>monitor</u> unit capable of being located in proximity to an individual having responsibility for <u>monitoring</u> a potential <u>theft</u> or vandalism <u>condition</u> of the vehicle.

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File: USPT

Feb 24, 2004

DOCUMENT-IDENTIFIER: US 6697103 B1

** See image for Certificate of Correction **

TITLE: Integrated network for monitoring remote objects

Abstract Text (1):

Integrated imaging and GPS network monitors remote object movement. Browser interface displays objects and detectors. Database stores object position movement. Cameras detect objects and generate image signal. Internet provides selectable connection between system controller and various cameras according to object positions.

Application Filing Date (1): 19980319

Brief Summary Text (7):

The invention resides in an integrated fixed and/or wireless network and associated database and software functionality for monitoring and processing remote and/or local moveable objects. Preferably, the system implementation integrates singlechip digital imaging camera and Global Positioning Satellite system (GPS) receivers through generally accessible server processors using the Internet network and a software browser or functionally equivalent interface coupled thereto for monitoring and analyzing remote or local movement of one or more objects.

Brief Summary Text (8):

An object database or functionally equivalent data structure provided in digital storage and accessible to control software dynamically stores one or more positional and relative movement as well as optional associated map data. Various digital <u>cameras</u> preferably disposed at certain fixed and/or movable locations detect mobile objects and generate object image signal for processing thereof as described herein for particular applications.

Detailed Description Text (8):

Controller 6 may include one or more standard digital microprocessor unit, operating system software (e.g., Windows, NT, CE, etc.), digital storage devices. (e.g., disk, memory, cache, etc.), output/input devices (e.g., keyboard, monitor, mouse, microphone, speaker, camera, etc.). Furthermore, controller 6 may include conventional network accessing interface firmware or circuit, such as Ethernet card, and remote processing or network access software such as web browser (e.g., Netscape Navigator, Microsoft Explorer, etc.), preferably using conventional or proprietary text, graphics, and other media format, such as Hyper Text Markup Language (HTML), Extensible Markup Language (XML), JAVA, or streamed video or audio data format. In this configuration, real-time or stored remote and/or local access is achieved via the Internet or functionally equivalent enterprise or intranet network of object data to or from one or more target units 4, for example, in accordance with the present invention.

<u>Detailed Description Text</u> (25):

Sensor unit 44 may include one or more video cameras, active sensor, infra-red detector, microphone, or other optical, medical, or otherwise physical monitoring or observation device to provide real-time object data, such as audio and/or video Record Display Form

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signals, or other electronically detectable frequency signal, such as infra-red, or other analog or digital electrical signal sensed from monitored object 2 depending on nature of object and kind of monitoring desired. Preferably, target unit 4 input sensor 44 processes authenticated voice pattern for proper recognition and/or dialing of user instructions or other language syntax, but one or more microphone audio functionality may be user-selectively de-activated for privacy or activated continuously for detection and recording.

Detailed Description Text (28):

In one embodiment, processor 48 monitors observed input to sensor 44 for new object data and provides such data to pre-configured webpage site. Controller 6 accesses and views such object data at corresponding site address or URL via Internet browser tool. User instructions and/or modifications thereto can be conveyed to target unit 4, for example, to change, select, or adjust particular sensors 44, such as camera focus, zoom, tilt, angle, pan, etc., or other such operational attribute of sensor device 44 of target unit 4.

Detailed Description Text (30):

Variety of remote object surveillance applications are contemplated, such with multiple sensors 44 using video cameras situated at regular intervals or hightraffic locations at remote sites to observe multiple or moving objects.

Detailed Description Text (39):

FIG. 3 shows block diagram of controller 6. Preferably, controller 6 is implemented in personal or portable computer or other conventional processing platform including output device and drivers 60 (e.g., display monitor, speaker, 3dimensional virtual reality (VR) and/or holographic display, etc.), input device and drivers 169 (e.g., touchscreen, keyboard, buttons, mouse, microphone, camera, etc.), microprocessor 48, and storage 49. Storage 49 may be implemented using digital video disk (DVD), so-called smart card format, or other conventional storage or digital memory device.

<u>Detailed Description Text</u> (88):

Hence, when object 2 is associated with customer of certain product or service provided by controller 6 user associated with vendor thereof, integrated system is appropriate for providing improved services. Such services may include customer interaction, communication, tracking and support, for example with respect to automobiles, to notify regularly scheduled times for car repair service or part replacement such as battery of object car product, or detect unscheduled object activity or monitored conditions, such as electronic signal indication of flat tires, discharged emergency air bag, vehicle accident, empty fuel gauge, exceeding certain speed limit, stolen vehicle operation (e.g., hot-wired ignition), etc.

Detailed Description Text (107):

In accordance with an important aspect of present invention, integrated approach combining positional data (e.g., processed GPS or other triangulated radio signals) and visual data (e.g., observed real-time video or other digital image), or other physical sensory data (e.g., patient medical vitals) are obtained. Such data are obtainable by set of fixed or relatively fixed (e.g., video cameras) or mobile (e.g., GPS receivers) disposed at various locations about monitored object presence and activities. Such integrated network of sensory and positional detectors may be arranged along streets, highways, bridges, intersections, elevators, buildings, restrooms, classrooms, hotel, offices, hospitals, prisons, storage warehouses, churches, stores, and virtually any other practical location of monitorable human or animal activity.

Detailed Description Text (115):

Therefore, to summarize key features of inventive methodology and system, following general steps are provided in brief sequential format as implemented in preferred solution: 1. Integrated Overlay. Provide integrated surveillance and communication

system, wherein mobile units are overlaid with fixed detector network. Both fixed and mobile units are accessible through the Internet. 2. Fixed Detection. Console user monitors object movement through multiple <u>camera</u> detectors coupled through the Internet. 3. Mobile Detection. Console user monitors object movement through mobile unit sensors and locators coupled wirelessly through the Internet. 4. Object Analysis. Control database and software combines fixed and mobile object data to monitor object movement relative to fixed surveillance sites. Fixed detectors observe object presence within certain area, while mobile sensor provide more accurate location as well as object sensor data. Database tracks historical, current, and predicted movement of object sets, thereby facilitating object search. 5. Processing Services. Commercial transactions deliver products and services more effectively to mobile object consumers. Secured access and graphical map outputs enhance system usefulness.

CLAIMS:

- 3. The system of claim 2 wherein: at least one of the detectors comprises a <u>camera</u> for generating a digitized image signal of a monitored object disposed relative to such <u>camera</u>, the controller receiving the digitized image signal to monitor such object.
- 7. An integrated system for real-time monitoring of one or more remote objects comprising: a target unit in proximity to one or more remote objects, the target unit comprising a sensor unit, and a communication unit, including at least a processor and an Internet access application, a controller comprising a browser software interface for accessing a website comprising remote real-time object data associated with the remote object and displaying the remote object data on a screen, a database comprising a representation of each monitored object, and software means for detecting movement of one or more monitored object and modifying the object representation of each object movement to indicate an updated position in the database; a plurality of <u>camera</u> detectors for detecting one or more objects monitored by the controller, and generating a digitized image signal of the monitored object disposed relative to the camera, the controller receiving the digitized image signal to monitor such object; and a digital Internet network for selectively interconnecting the controller to one or more camera detectors; wherein the controller remotely monitors a position signal associated with a mobile position of a given object, the position signal being generated by a mobile target unit comprising a cellular telephone comprising a global positioning system (GPS) receiver coupled to such given object when such object is moveable within an observable range, and a visual signal associated with a visible observation of such given object, the visual signal being generated by a fixed camera detector uncoupled to such given object in the observable range, thereby enabling corroborative surveillance effectively by the controller of the given object by monitoring the positional and visual signals in the observable range, whereby a user monitoring the controller may communicate with the cellular telephone during the corroborative surveillance, the controller further monitoring a medical signal associated with physical sensing of the object, thereby enabling remote diagnosis of the medical signal corroboratively with the visual and positional signals.
- 8. An integrated system for electronically monitoring remote objects comprising: a controller comprising a browser software interface for monitoring one or more moveable objects and graphically displaying at least one monitored object, a database comprising a representation of each monitored object, and software means for detecting movement of one or more monitored object and modifying the object representation of each object movement to indicate an updated position in the database; a plurality of <u>camera</u> detectors for detecting one or more objects monitored by the controller, and generating a digitized image signal of the monitored object disposed relative to the <u>camera</u>, the controller receiving the digitized image signal to monitor such object; and a digital Internet network for selectively interconnecting the controller to one or more <u>camera</u> detectors; wherein

the controller monitors a global position signal associated with a mobile position of a given object, the global position signal being generated by a cellular telephone associated with such given object when such object is moveable within an observable range, and a visual signal associated with a visible observation of such given object, the visual signal being generated by a fixed camera detector uncoupled to such given object in the observable range, thereby enabling corroborative surveillance effectively by the controller of the given object by monitoring the positional and visual signals in the observable range, whereby a user monitoring the controller may communicate with the cellular telephone during the corroborative surveillance, the controller further monitoring a medical signal associated with physical sensing of the object, thereby enabling remote diagnosis of the medical signal corroboratively with the visual and positional signals.

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L11	L9 not 110	. 7	L11	
L10	L9 and (barcode or "bar-code")	2	L10 ´	
L9	L8 and @ad<=19980529	9	L9	
· L8	(camera or (prox\$ with sens\$)) and shop\$ and (pda or portable or handheld or "hand-held") and remote\$	817	L8	
DB=JP	AB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=OR			
Ļ7	(camera or (prox\$ with sens\$)) and shop\$ and (pda or portable or handheld or "hand-held") and remote\$	5	L7	
L6	(prox\$ with sens\$) and shop\$ and (pda or portable or handheld or "hand-held") and remote\$	0	L6	
DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR				
L5	L4 and (prox\$ with sens\$)	2	L5	
L4	5664110.pn.,or 6314406.pn.	2	L4	
L3	L2 and l1	6	L3	
L2	((705/26 705/27)!.CCLS.)	1055	L2	
L1	(prox\$ with sens\$) and shop\$ and @ad<=19980529	393	L1	

END OF SEARCH HISTORY